

**In the Drawings:**

Please amend the Drawings, as follows:

Figure 1A has been amended to "FIG. 1B" per Examiner's objection on page 2 of the Office Action mailed April 25, 2005.

Figure 1B has been amended to "FIG. 1A" per Examiner's objection on page 2 of the Office Action mailed April 25, 2005.

REMARKSStatus of the Claims

Claims 4-39 are currently pending in the present application.

Claims 4-39 are currently rejected. No amendments to the claims are being made at this time.

Amendments to the Specification

Applicant has studied the Office Action mailed on April 25, 2005, and offers the following remarks in response thereto.

Applicant has amended several paragraphs of the Specification, as shown above, to comply with Examiners objection number 5 on page 4 of the Office Action mailed April 25, 2005.

Applicant has amended the paragraph starting on page 3, line 30 in the Specification to separate the descriptions of Figures 1A and 1B. No new matter has been added.

Applicant has amended the paragraph starting on page 4, line 3 in the Specification to include a description of Figure 1C. No new matter has been added.

Applicant has amended the paragraph starting on page 4, line 33 in the Specification to include a description of Figures 8-13 as supported by original unnumbered figures. No new matter has been added.

Applicant has amended the paragraph starting on page 6, line 33 in the Specification to comply with Examiner's objection number 5 on page 4 of the Office Action mailed April 25, 2005 and to include the description of Figure 8. No new matter has been added.

Applicant has amended the paragraph starting on page 11, line 30 in the Specification to comply with Examiner's objection number 5 on page 4 of the Office Action mailed April 25, 2005 and to correct a typographical error. No new matter has been added.

Applicant has amended the paragraph starting on page 14, line 27 in the Specification to comply with Examiner's objection number 5 on page 4 of the Office Action mailed April 25, 2005 and to correct a typographical error. No new matter has been added.

Applicant has amended the Abstract of the Disclosure in order to comply with the objections 3 and 4 cited by the Examiner on page 3 of the Office Action mailed April 25, 2005.

Support of the added terminology referring to a "system" can be found in originally filed claims 4-7, 12-25, and 31-36. No new matter has been added.

#### Drawings

Figure 1C was shown on page 1 of 14 of the drawings submitted in the original parent application as referenced on PAIR. Therefore, Figure 1C is not new matter as claimed by the Patent Office on page 5 of the Office Action mailed April 25, 2005.

Figure 8 refers to the figure shown on the top portion of page 3 of 14 of the drawings submitted in the originally filed application found on PAIR. Therefore, Figure 8 is not new matter as claimed by the Patent Office on page 5 of the Office Action mailed April 25, 2005.

Figure 9 refers to the figure shown on the bottom portion of page 3 of 14 of the drawings submitted in originally filed application found on PAIR. Therefore, Figure 9 is not new matter as claimed by the Patent Office on page 5 of the Office Action mailed April 25, 2005.

Figure 10 refers to the figure shown on page 10 of 14 of the drawings submitted in originally filed application found on PAIR. Therefore, Figure 10 is not new matter as claimed by the Patent Office on page 5 of the Office Action mailed April 25, 2005.

Figure 11 refers to the figure shown on page 4 of 14 of the drawings submitted in originally filed application found on PAIR. Therefore, Figure 11 is not new matter as claimed by the Patent Office on page 5 of the Office Action mailed April 25, 2005.

Figure 12 refers to the figure shown on the top portion of page 11 of 14 of the drawings submitted in originally filed application found on PAIR. Therefore, Figure 12 is not new matter as claimed by the Patent Office on page 5 of the Office Action mailed April 25, 2005.

Figure 13 refers to the figure shown on the bottom portion of page 11 of 14 of the drawings submitted in originally filed application found on PAIR. Therefore, Figure 13 is not new matter as claimed by the Patent Office on page 5 of the Office Action mailed April 25, 2005.

Figure 14 is herein canceled by this amendment, without prejudice, since the matter is duplicated from Figure 4 of the most recent figures submitted in the 3/23/2005 amendment.

Figure 15 is herein canceled by this amendment, without prejudice, since the matter is duplicated from Figure 2 of the most recent figures submitted in the 3/23/2005 amendment.

Rejections

*Claims 4-11, 17-21, 25 are rejected under 35 U.S.C. § 112, ¶ 1*

The Patent Office has rejected independent claims 4 and 8, stating that the claims recite a limitation, “means for transferring said still images from said cameras into a digital data format; means for transferring said digital data into a time-sequence of frames,” which is not disclosed in Figures 1B or 3A, or the Specification. Applicant respectfully traverses.

Before addressing or resolving each of the rejections under the “written description” requirement of 35 U.S.C. § 112, ¶ 1 made by the Patent Office, the Applicant wishes to address the standard for this type of rejection.

The Federal Circuit has long held that the written description need not provide *ipsis verbis* support of claim term. As stated in *In re Alton*, 76 F.3d 1168, 1175, 37 USPQ.2d 1578, 1584 (Fed. Cir. 1996):

If . . . the specification contains a description of the claimed invention, albeit not in *ipsis verbis* (in the identical words), then the examiner or Board, in order to meet the burden of proof, must provide reasons why one of ordinary skill in the art would not consider the description sufficient. *Id.* at 1175. If a person of ordinary skill in the art would have understood the inventor to have been in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, then the adequate written description requirement is met. *Id.*

Thus, for any rejection to stand under 35 U.S.C. 112, ¶ 1, the Patent Office must, in order to meet the burden of proof, provide reasons why one of ordinary skill in the art would not consider the description sufficient. Further, a claim term does not have to be included *ipsis verbis* in the Specification in order to meet the written description requirement.

Applicant provides reference to where support can be found for certain claims under this rejection.

The description of the figures found on page 3, lines 30-35 through page 4, lines 1-3 of the original application (PAIR) and Figure 1A discloses that the present invention implements a computer 150, video storage 152, alternative on-camera storage 153, and electrical or fiber optic communication paths 160 between components. A person skilled in the art would know that the implementation of a computer and storage coupled to the cameras would allow for images taken

by the camera to be stored in a digital format. Further, the transferring images from the camera in a digital data format is shown by the use of electrical or fiber optic communication paths 160. (Page 4, lines 1-3; Figure 1A). Therefore, one skilled in the art would be enabled by the disclosure contained within the original application. Applicant respectfully requests that the rejection of claims 4 and 8 under 35 U.S.C § 112, first paragraph be removed.

Further, the rejection of claims 5-7 and 9-11 as being dependent on claims 4 and 8, respectively, is traversed. For the reasons argued above, independent claims 4 and 8 should be allowed and therefore dependent claims 5-7 and 9-11, respectfully, should also be allowed for this reason alone. Applicant respectfully requests that the rejection of these claims be removed.

The Patent Office has rejected independent claims 17 and 25, stating that the claims recite a limitation of "two dimensional" array of cameras, which is not disclosed in Figures 1B, 3A, or the specification. Applicant respectfully traverses.

Examiner specifically points out portions of the Applicant's application where the cameras may be placed in a two-dimensional configuration. On page 3, lines 30-35 Applicant specifically states that the array may be "...curvilinear, dome-like, or many other shapes." A "curvilinear" and/or "dome-like" shape is a two-dimensional figure, which may be referenced as extending in the x-y, x-z, or y-z direction. One ordinarily skilled in the art would be enabled to understand that a two-dimensional array would correspond to the curvilinear or dome-like shape of the present invention. Therefore, the rejection of claims 17 and 25 under 35 U.S.C. 112, first paragraph is improper and should be withdrawn for this reason alone.

Further, the rejection of claims 18-21 as being dependent on claim 17 is improper and traversed by the Applicant. For the reasons argued above, claim 17 should be allowed and therefore, dependent claims 18-21 should also be allowed for this reason alone. Applicant respectfully requests that the rejection of these claims be withdrawn.

***Claims 12, 14-15, 22, 24, 26, 28-29, 31-32, 34-35, 37-38 rejected under 35 U.S.C. § 102(b)***

The Patent Office has rejected claims 12, 14-15, 22, 24, 26, 28-29, 31-32, 34-35, and 37-38 are under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent 5,184,732 to Ditchburn et al. (hereinafter "Ditchburn"). Applicant respectfully traverses. In order for the Patent Office to establish anticipation, the Patent Office must show where each and every element of the claim is shown in the reference. Furthermore, the elements must be arranged as claimed. MPEP § 2131.

Claims 12, 14-15, 22, 24, 26, 28-29

Regarding independent claims 12, 22, and 26, the Patent Office states that Ditchburn shows “transferring said still images from said cameras in a preselected order along said path onto a sequence of frames in said motion picture medium....” (Figure 2, Column 4, lines 27-28, underlining added). However, there is no language or disclosure in Ditchburn that accurately represents this statement by the Patent Office. **There is no mention of transferring anything from the “viewers” of Ditchburn onto a sequence of frames of a motion picture medium, or generating said motion picture medium as claimed in independent claims 12, 22, and 26.**

Further, the Patent Office has expressly states that Ditchburn “...fails to specifically disclose each camera from said array of cameras records said still image on photographic film...” on page 12 of the Office Action mailed on April 25, 2005. Therefore, Ditchburn does not disclose all the elements of claims 12, 22, and 26, and thus their dependent claims 14-15, 24, and 28-29, and Applicant respectfully requests that the rejection of these claims under 35 U.S.C. § 102(b) be withdrawn for this reason alone.

Claims 31-32, 34-35, 37-38

Regarding independent claims 31, 34, and 37, on page 10 of the Office Action mailed April 25, 2005 the Patent Office states that Ditchburn discloses a system comprising:

“a control system...adapted to ii) select a first portion of video from the first camera ending at a first time; iii) select a second portion of video from the second video camera beginning at a second time; iv) select images from the plurality intermediate cameras corresponding to a time equal to or between the first and second times...” (underlining added)

However, there is no language in Ditchburn that accurately represents this statement by the Patent Office. **There is no mention of selecting video from the “viewers” of Ditchburn that relates to two different time periods.** Ditchburn fails to disclose that the images of the viewer can be taken sequentially. Therefore, Ditchburn has not shown all the elements of claims 31, 34, and 37, and thus their dependent claims 32, 35, and 38, and Applicant respectfully requests that the rejection of these claims under 35 U.S.C. § 102(b) be withdrawn for this reason alone.

***Claims 13, 16, 23, 27, and 30 rejected under 35 U.S.C. § 103(a)***

Claims 13, 16, 23, 27, and 30 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Ditchburn as modified by U.S. Patent 3,815,979 to Collender (hereinafter "Collender").

Applicant respectfully traverses for two reasons. First, the motivation provided by the Patent Office to combine Ditchburn with Collender is improper and thus the Patent Office has failed to establish a *prima facie* case of obviousness. MPEP § 2143. Collender actually teaches away from the present invention. Second, Ditchburn is non-analogous art and thus cannot be used to establish a *prima facie* case of obviousness. MPEP § 2141.01(a).

**Motivation to Combine**

First, to help avoid the insidious call of hindsight reconstruction, the Federal Circuit has mandated that when the Patent Office proposes combining or modifying references, the Patent Office must articulate some reason why the combination or modification is desirable.

Furthermore, this reason must be supported by actual evidence. *In re Dembicza*k, 175 F.3d 994, 999 (Fed. Cir. 1999); see also *In re Lee*, 277 F.3d 1338, 1343-44 (Fed. Cir. 2002); MPEP § 2143.01.

Here, the Patent Office has not advanced proper motivations to combine Ditchburn and Collender. On page 12 of the Office Action mailed on April 25, 2005, the Patent Office states that the motivation to combine Ditchburn with Collender is that "...Collender teaches images captured by cameras 1 through n are recorded on film..." and "...Collender teaches pictures may be recorded on ordinary motion picture film..."

There is an insufficient motivation to combine Collender with Ditchburn, because the cameras shown in Collender cannot record images simultaneously, as is disclosed for the system in Ditchburn. Thus, one of ordinary skill in the art would not look to the sequential system of Collender to combine with Ditchburn due to this lack of interrelationship between the systems, and because Collender actually teaches away from the present invention in this manner.

Collender discloses a system wherein "a projector 25 projects pictures from camera positions 1 through n while slit 27 moves over these same relative positions of cameras 1 through n." (Column 4, lines 30-38, underlining added). This process is repeated when the last picture from camera n is projected. This cycling then forms "a three dimensional picture of scene

enclosure 7 which can be viewed by any reasonable number of observers." (Column 4, lines 39-43). Thus, Collender records images from a plurality of cameras through a slit, and thus the images are not obtained simultaneously, but sequentially as controlled by the rotation of the slit allowing a path between a given single camera and the image to be recorded.

Although Collender does state in its disclosure that the cameras can operate concurrently or sequentially to photograph a scene (Column 3, lines 49-51) it would be impossible for the cameras in Collender to take an image of a targeted scene at the same instance in time, hence simultaneously, due to the slit 27 in the drum that moves over these relative positions of cameras 1 through n sequentially. (Column 4, lines 13- 15 and 29-32).

Thus, the suggestion to combine the references offered by the Patent Office would change the principle operation of the prior art invention being modified and would render the prior art unsatisfactory for its intended purpose, providing no support for a case of *prima facie* obviousness. MPEP § 2143.01. Therefore, the rejection of claims 13, 16, 23, 27, and 30 should be withdrawn.

A further difference between Collender and Ditchburn that exists, thus providing additional support for lack of motivation to combine, is that **Collender projects a human perceptible three-dimensional image, whereas Ditchburn is an object recognition system for distinguishing and sorting between different types of objects using non-human perceptible views.**

Collender teaches images captured by cameras 1 through n, and teaches that these pictures may be recorded on ordinary motion picture film. Collender requires that the related images of a scene be viewed behind a rapidly moving vertical slit aperture, which prevents one eye of a human from seeing what the other eye sees at any and every instant of time. (Column 2, lines 6-10). This is evidenced by Collender in stating that the "[p]rojector 25 projects pictures from camera positions 1 through n while slit 27 moves over these same relative positions of cameras 1 through n." Collender also states that this technique and object of the invention is to provide viewing of three-dimensional images without the use of viewing aids at the eyes of the observer. In contrast, the invention of Ditchburn implements viewers that are each directed at an illuminator, wherein an object is dropped through a viewing zone relating to the viewers and is represented as a dark object against a light field in an image by the viewer. (Column 3, lines 47-52). The images seen by the viewers relating to these objects are simply used to create data

signals representative of the edges of the object as viewed by the viewer, which are fed to a computer system in order to classify the shape of the object. Once these objects are classified by shape, they are sorted or classified into shape categories. (Column 4, lines 18-25). Further, Ditchburn does not contain any suggestion or motivation of having humans view images taken of the objects that pass through the viewing field.

Ditchburn is Non-analogous Art

Second, in order for the Patent Office to establish a *prima facie* case of obviousness by combining two or more references, the references must be analogous art. MPEP § 2141.01(a). The Federal Circuit has articulated the test to determine if a reference is analogous as follows:

In order to rely on a reference as a basis for a rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned. *In re Oetiker*, 977 F.2d 1443, 1446 (Fed. Cir. 1992).

**Regarding the first prong of the test**, it is clear that the prior art reference of Ditchburn is not within the same field of endeavor as the invention in the present application. Ditchburn involves a system used for sorting and classifying the shapes of objects that are passed through the viewing zone of its viewers. The viewers use the images of the objects to create electronic signals used in order to determine the classification of an object and to sort it accordingly. In contrast, the present invention relates to a method of creating visual effects that can be incorporated into motion picture movies. The images taken in the present invention are subsequently selected, assembled, and displayed as a sequence of images captured by the array of cameras to create a visual illusion that a motion-picture camera has moved along the predetermined path while photographing the object or scene.

**Regarding the second prong of the test**, Ditchburn is not reasonably relevant to the particular problem with which the present invention is concerned. Applicant's invention involved creating special visual effects using an array of cameras that take images of the targeted object or scene, wherein these images are used in creating an illusion that a motion-picture camera has moved along the arrayed path. (Specification pages 3, 6-8; claims 4, 12, 17, 22, 26, and 31). Ditchburn is not concerned with this problem. Ditchburn is concerned with classifying objects that fall through a viewing zone and sorting these objects into varying bins. (Column 3,

lines 53-68 - column 4, lines 1-7). Therefore, one skilled in the art would not look to Ditchburn to solve the problems remedied by the Applicant's application.

For the reasons explained above, Ditchburn is non-analogous art, and this obviousness rejection of claims 13, 16, 23, 27, and 30 must be withdrawn.

*Claims 33, 36, and 39 rejected under 35 U.S.C. § 103(a)*

The Patent Office has rejected claims 33, 36, and 39 as being obvious under 35 U.S.C. § 103(a) over Ditchburn in view of U.S. Patent 4,453,182 to Wilkinson et al. (hereinafter "Wilkinson").

Applicant respectfully traverses for two reasons. First, the motivation provided by the Patent Office to combine Ditchburn with Wilkinson is improper and thus the Patent Office has failed to establish a *prima facie* case of obviousness. MPEP § 2143. Second, as argued above, Ditchburn is non-analogous art and thus cannot be used to establish a *prima facie* case of obviousness. MPEP § 2141.01(a).

Motivation to Combine

First, the Patent Office has not advanced proper motivations to combine Ditchburn and Wilkinson. On page 13 of the Office Action mailed on April 25, 2005, the Patent Office states that the motivation to combine Ditchburn with Wilkinson is that "...Wilkinson et al. a television system, which includes plurality of video cameras, the cameras are sequentially triggered by a sequential switch.... This shows that the first time and second time differ by a time period."

Although Wilkinson does disclose a plurality of video cameras that are sequentially triggered to take images of different time periods, the invention disclosed by Wilkinson is designed to permit "the observation of a single event by a plurality of cameras along the same path of view." (Column 3, lines 32-35, emphasis added). This is further demonstrated in Figure 1, by the use of a "prism 50," wherein the "prism" is oriented "in the path of view of the lenses 26 and 28, respectively, of cameras 22 and 24." (Column 4, lines 60-62).

Ditchburn, on the other hand, involves a system which is designed to view images of objects falling through a viewing zone along differing view paths relating to the position of each viewer. (Figure 1).

Thus, the suggestion to combine the references of Ditchburn and Wilkinson offered by the Patent Office would change the principle operation of the prior art invention being modified. Further, the combination would render the prior art unsatisfactory for its intended purpose, thereby providing no support for a case of *prima facie* obviousness. MPEP § 2143.01.

Therefore, the rejection of claims 33, 36, and 39 should be withdrawn.

### Non-analogous Art

Second, for the reasons explained above, Ditchburn is non-analogous art. Further, one skilled in the art would not look to Ditchburn in trying to solve the problem disclosed by Applicant. Therefore, the obviousness rejection of claims 33, 36, and 39 is improper and must be withdrawn.

Respectfully submitted,

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